



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, ILLINOIS 60604**

**DATE:** APR 23 2019

**SUBJECT:** CLEAN AIR ACT INSPECTION REPORT  
Fox River Valley Ethanol, LLC, Oshkosh, Wisconsin

**FROM:** Manojkumar P. Patel, Environmental Engineer  
AECAB (MI/WT)

**THRU:** Sarah Marshall, Section Chief  
AECAB (MI/WT)

**TO:** File

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**BASIC INFORMATION**

**Facility Name:** Fox River Valley Ethanol, LLC, Oshkosh, Wisconsin

**Facility Location:** 4995 State Road 91, Oshkosh, Wisconsin 54904

**Date of Inspection:** February 26, 2019

**EPA Inspector(s):**

1. Manojkumar P. Patel, Environmental Engineer
2. Albana Bega, Environmental Engineer

**Other Attendees**

1. Stanley D. Mermall, Air Compliance Inspector, Wisconsin Department of Natural Resources
2. Janell Tatro, Environmental, Health, Safety Manager, Fox River Valley Ethanol, LLC
3. Arend Gibson, Plant Manager, Fox River Valley Ethanol, LLC

**Contact Email Address:** agibson@frvethanol.com

**Purpose of Inspection:** Wisconsin State Implementation Plan requirements

**Facility Type:** Ethanol Manufacturing

**Arrival Time:** 10:30 AM CST

**Departure Time:** 5:30 PM CST

**Inspection Type:**

- ☒ Unannounced Inspection
- ☐ Announced Inspection

**OPENING CONFERENCE**

- ☒ Credentials Presented
- ☒ CBI warning to facility provided

The following information was obtained verbally from the facility personnel unless otherwise noted.

**Process Description:**

See Appendix B for a detailed process description provided by the facility.

**TOUR INFORMATION**

**EPA toured the facility:** Yes

**Photos and/or Videos:** were taken during the inspection.

**Field Measurements:** were taken during this inspection.

**RECORDS REVIEW**

1. Screen shot of the RTO
2. Facility Process Flow Diagram
3. Plant Processes layout
4. Process Narrative
5. LDAR Semi-annual Reports for 2017 and 2018
6. Column Grain Dryer Specification Model Z50406
7. PM Stack Test Reports for Grain Screening Operations

**CLOSING CONFERENCE****Requested documents:**

- Stack Test Report for CO<sub>2</sub> Scrubber and Vent Gas Scrubber;
- Regenerative Thermal Oxidizer (RTO) Operations Manual Vol 1, Section 5 and 9
- Dryer + RTO Stack Testing Reports in 2006
- Screen Shots for Ring Dryer Bed Cooler, and CO<sub>2</sub>+Vent gas Scrubber
- 2017 and 2018 LDAR Database Copy (Maintained by a Consultant)

**Concerns:** We discussed the following concerns regarding the facility's operations and its air pollution control devices:

- VOC stack tests on CO<sub>2</sub> Scrubber and Vent Gas Scrubber were performed more than 10 years ago when the facility's name plate capacity was at or around 40 MMG/year;
- The facility recently upgraded its ethanol production capacity significantly, but it did not perform VOC stack tests from the fermenters; and
- The facility informed EPA that the fermenters generate most VOCs during 0 to 18 hours (of 52 hours cycle time) but the historical VOC stack tests at the facility were performed during unknown operating conditions.

**SIGNATURES**

Report Author: RS Pat Date: 4/23/19

Section Chief: Sam Marshall Date: 4/23/19

## APPENDICES AND ATTACHMENTS

1. Appendix A – Digital Image Log
2. Appendix B – Attachments

**Facility Name:** Fox River Valley Ethanol, LLC, Oshkosh, Wisconsin

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**APPENDIX A: DIGITAL IMAGE LOG**

<b>1. Inspector Name:</b> Manojkumar P Patel	<b>2. Date(s) of Inspection:</b> February 26, 2019
<b>3. Company/Facility Name:</b> Fox River Valley Ethanol, LLC, Oshkosh, Wisconsin	<b>4. Street Address, City, State:</b> 4995 State Road 91, Oshkosh, Wisconsin 54904
<b>5. Number of Images:</b> 24	<b>6. Archival Record Location:</b> USB Flash Drive labeled as "CAA Inspection for Fox River Valley Ethanol LLC Oshkosh WI Images"

Image Number	File Name	Date and Time (incl. time zone and DST)	Latitude and Longitude	Description of Image
1	DC_2057.jpg			Storage Silos
2	DC_2058.jpg		43.98065, -88.6517	Tank Farm
3	DC_2062.jpg		43.981283, -88.65165	Grain receiving
4	DC_2063.jpg		43.98125, -88.6516	Day Bin
5	DC_2064.jpg		43.98125, -88.6516	Day Bin (Repeat)
6	DC_2068.jpg			Tank
7	DC_2069.jpg			Slurry Tank
8	DC_2070.jpg			Facility Process Area
9	DC_2071.jpg			Thin Stillage Tank
10	DC_2072.jpg			Thin Stillage tank (repeat)
11	DC_2073.jpg			Scrubber Vent Gas
12	DC_2074.jpg			CO2 Scrubber
13	DC_2075.jpg			Process Area
14	DC_2076.jpg			Process Area (Repeat)
15	DC_2077.jpg			Vent from Scrubbers
16	DC_2078.jpg			Flash Recovery Condensor #2
17	DC_2079.jpg			Boiler
18	DC_2081.jpg			Boiler (Repeat)

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19	DC_2088.jpg		43.981667, -88.650383	3rd Effect Evaporator
20	DC_2089.jpg		43.981683, -88.650417	2nd Effect Evaporator
21	DC_2090.jpg			Beer Column
22	DC_2091.jpg		88.6505	Facility process Area
23	DC_2092.jpg		43.981083, -88.650133	Process Area - Evaporators
24	DC_2094.jpg		43.9811, -88.650167	View of Fermenters' Top

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**APPENDIX B: ATTACHMENTS**

1. Fox River Valley Ethanol Manufacturing Process Narrative
2. Fox River valley Ethanol Process Flow Chart
3. Safety Equipment Map